From: <u>Mishkin, Katherine</u>
To: <u>Zeno, Denise</u>

Subject: RE: MW-3R at Extasy Q Prints

Date: Monday, August 05, 2013 8:20:34 AM

## Thanks for the update.

From: Zeno, Denise

**Sent:** Monday, August 05, 2013 7:30 AM **To:** Hauptman, Mel; Mishkin, Katherine **Subject:** FW: MW-3R at Extasy Q Prints

From: Schofield, Susan [mailto:SchofieldSE@cdmsmith.com]

**Sent:** Friday, August 02, 2013 2:04 PM

To: Zeno, Denise

Subject: MW-3R at Extasy Q Prints

Buenas tardes Denise,

I want to bring you up to date with the drilling at Cabo Rojo. With a new drilling rig, we attempted to drill to 200 feet in a location near Extasy Q Prints. Here is a summary.

- We set the surface casing at 92 feet.
- We continued drilling but some rock layers were very fractured and also very water productive. We got to 158 feet and the driller could feel that the borehole was not staying open. He pulled the pipe up into the casing so it would not get stuck by the borehole collapse.
- The driller lowered the hammer back into the hole and it had collapsed back to about 138 feet. The equipment was removed from the open borehole overnight.
- The next morning, the open part of the hole had collapsed back to about 98 feet, or about 6 feet below the casing. We attempted to clean out the hole, but collapse was a continual issue.
- Due to the repeated collapses and the narrow 4 inch borehole, we cannot clean out the boring (it keeps collapsing) and we also cannot grout it because the broken rock is too small to get a tremie pipe through to pump grout. We have no way to pressurize the grout to get it to go down such a long open hole interval.
- CDM Smith recommends that we leave the monitoring well as it currently is, with 6 feet of open hole.

On a positive note, we have successfully completed the shallow bedrock monitoring well at this location, with a single 10-foot screen from 56-66 feet, near the first water zone.

Please let me know if you want to discuss the situation at MW-3R (deep) – I will be in the office all next week.

Have a good weekend.

Susan

SUSAN E. SCHOFIELD, P.G. CDM SMITH
1225 PONCE DE LEON AVENUE VIG TOWER, SUITE 603
SAN JUAN, PR 00907
SCHOFIELDSE@CDMSMITH.COM
787-722-5428
203-645-2549 (MOBILE)